REMARKS

Reconsideration of this application is respectfully requested.

Claim 34 was objected to under 37 C.F.R. § 1.75(c) as being an improper dependent claim for failing to further limit the subject matter of a previous claim. Claim 34 has been cancelled and replaced by claim 70. Claim 70 directly depends from claim 69. Accordingly, the objection may be withdrawn.

Claim 53 was rejected under 35 U.S.C. § 112, first paragraph, as being "a single means claim". Claim 53 has been cancelled. Accordingly, the rejection may be withdrawn.

Claims 10 and 41 were rejected under 35 U.S.C. § 112, first paragraph, because of the recitation of "a DNA probe" and the recitation of "sequence". These claims have been replaced by claims 63 and 92, respectively. The language the Examiner found to be objectionable in claims 10 and 41 has been omitted from claims 63 and 92.

Claims 11-14 and 42-45 were rejected under 35 U.S.C. § 112, first paragraph. The Examiner objected to the terminology "consisting essentially of" and "sequence" in these claims.

These claims have been replaced by claims 64-67 and 93-96, respectively. The new claims do not contain the language the Examiner found to be objectionable.

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Claims 24-30, 34, and 46-52 were rejected under 35 U.S.C. § 112, first paragraph. Once again, the Examiner objected to the term "sequence" in these claims. The Examiner also objected to the recitation of step of "selecting a nucleotide sequence coding for hap protein." The Examiner also observed that no hybridization conditions were specified. These claims have been replaced by claims 72-78, 70, and 87. The language the Examiner found to be objectionable has been omitted from these claims. In addition, the new claims recite that the process is carried out "under hybridization conditions".

Claim 1 was rejected under 35 U.S.C. § 112, second paragraph, for lack of antecedent basis for the recitation "said DNA". Claims 2, 3, 10-14, 24-31, 33, 34, 40, and 43-45 were rejected for the same reason as being dependent from claim 1. Claim 1 has been replaced with claim 60, which does not recite "said DNA". Accordingly, this rejection may be withdrawn.

Claims 1-14, 24-31, 33, 34, 46-52, and 57 were rejected as being vague and indefinite in the recitation of the terms "hap gene" and/or "hap protein". Since the quoted expressions do not appear in the new claims, this rejection may be withdrawn.

Claim 34 was rejected as being indefinite and confusing because there was no antecedent basis for "[b]acterial culture as claimed in claim 27". Claim 34 has been replaced by claim 70, which depends from claim 69. Claim 69 provides proper antecedent

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basis for the recitations in claim 70. Accordingly, this rejection may also be withdrawn.

Claim 53 was found to be confusing in the recitation of a "DNA sequence of coding for". Claim 53 has been replaced by claim 79 in which the wording has been clarified.

Claims 4-9, 53, and 57 were rejected as being vague and indefinite in the recitation of "retinoic acid receptor- β polypeptide" ("RAR- β "). This rejection has been obviated by omitting the quoted expression from the new claims.

Claim 57 was deemed to be vague and indefinite in the recitation of numerical coordinates of amino acid residues and the recitation of a "mature retinoic acid receptor- β polypeptide". Claim 57 has been replaced by claim 80, which does not contain the numerical coordinates or the quoted expression.

Claims 1-3, 39, 40, and 59 were rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter. The Examiner found the recitation of a DNA "sequence" to be objectionable. The term "sequence" has been omitted from the new claims.

Finally, claims 24-30, 34, and 46-52 were rejected under 35 U.S.C. § 101 as being inoperative and therefore lacking in utility. The Examiner observed that these claims required a specific outcome of "selecting a nucleotide sequence coding for hap protein. . . " The Examiner alleged that there was no

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recitation of elements required to achieve such an outcome. The quoted expression does not appear in the new claims.

Accordingly, the rejection has been obviated.

The Examiner is respectfully requested to reconsider and withdraw each of the objections and grounds for rejection in view of the foregoing amendments and remarks. Allowance of the new claims is respectfully requested.

Claims 32 and 54 were found to be allowable as written.

These claims have been cancelled and replaced by claims 71 and 88.

Claims 55 and 56 were objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claims 55 and 56 have been cancelled and replaced by claims 97 and 98.

Early favorable action by the Examiner is respectfully requested. If there are any other fees due in connection with the filing of this response, that have not been accounted for, please charge such fees to our Deposit Account No. 06-0916. If a fee is required for an extension of time under 37 C.F.R. §§ 1.136

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that has not been accounted for above, such an extension is requested and the fee should also be charged to our Deposit Account.

Respectfully submitted,

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